

Agilent Ref: 10030712-1  
United States Application Serial No. 10/722,950

### AMENDMENTS

#### In The Claims:

Please cancel Claims 2-11, 14, 15, 25, 26, 40-52, and 56.

1. (Previously Presented) A method for treating a backing element comprising a gasket for forming a sealed array assay chamber when joined to a microarray substrate, said method comprising at least one of: (1) depositing a component on said gasket, (2) extracting a component from said gasket, (3) surface modifying said gasket, to treat said gasket.

2.-15. (Canceled)

16. (Previously Presented) The method of Claim 1, wherein said method comprises surface modifying said gasket.

17. (Previously Presented) The method of Claim 16, wherein said surface modification comprises contacting said gasket with a plasma.

18. (Previously Presented) The method of Claim 17, wherein said plasma is produced from a gas selected from the group consisting of nitrogen, air, argon, oxygen, nitrous oxide, helium, water vapor, carbon dioxide, methane, and combinations thereof.

19.-26. (Canceled)

27. (Previously Presented) The method of Claim 1, wherein said treating comprises increasing the hydrophilicity of said gasket.

28. (Currently Amended) The method of Claim 1, wherein said treating allows ~~provides a seal about~~ said gasket to form a seal.

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29. **(Previously Presented)** The method of Claim 1, wherein said treating comprises sequentially contacting said gasket with at least two of: plasma, UV with O<sub>2</sub> and a solvent.

30.-52. **(Cancelled)**

53. **(Previously Presented)** A method for treating a backing element comprising a gasket for forming a sealed array assay chamber when joined to a microarray substrate, said method comprising surface modifying said gasket to treat said gasket.

54. **(Previously Presented)** The method of Claim 53, wherein said surface modification comprises contacting said gasket with a plasma.

55. **(Previously Presented)** The method of Claim 54, wherein said plasma is produced from a gas selected from the group consisting of nitrogen, air, argon, oxygen, nitrous oxide, helium, water vapor, carbon dioxide, methane, and combinations thereof.

56. **(Cancelled)**

Please add new claims 57-62.

57. **(New)** A method for treating a backing element comprising a gasket, wherein said method comprises:

surface modifying said gasket to treat said gasket; and  
producing a sealed array assay chamber comprising said gasket about at least one array of a microarray assembly.

58. **(New)** The method of Claim 57, wherein said surface modification comprises contacting said gasket with a plasma.

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59. (New) The method of Claim 58, wherein said plasma is produced from a gas selected from the group consisting of nitrogen, air, argon, oxygen, nitrous oxide, helium, water vapor, carbon dioxide, methane, and combinations thereof.
60. (New) The method of Claim 57, wherein said treating comprises increasing the hydrophilicity of said gasket.
61. (New) The method of Claim 57, wherein said treating allows said gasket to form a seal.
62. (New) The method of Claim 57, wherein said treating comprises sequentially contacting said gasket with at least two of: plasma, UV with O<sub>2</sub> and a solvent.